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10/032,226	12/18/2001	Markus Hess	010826	3496

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EXAMINER

SAN MARTIN, EDGARDO

ART UNIT PAPER NUMBER

2837

DATE MAILED: 06/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/032,226

Applicant(s)

HESS, MARKUS

Examiner

Edgardo San Martin

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1 – 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lynn (US 5,856,640) in view of Gerber (US 3,842,941).

With respect to Claim 1, Lynn teaches a method for testing an engine of a jet aircraft in a ground run-up enclosure (GRE) (Fig.5, Item 50), the jet aircraft having an elongate body defining an aircraft axis and the engine having an air inlet and an exhaust outlet aligned substantially parallel to the aircraft axis, the ground run-up enclosure having a rear wall, a pair of side walls attached to the rear wall and an open front side opposite the rear wall (Fig.5), the method comprising moving the jet aircraft into the ground run-up enclosure, it is inherent that the jet aircraft needs to be positioned inside the GRE by any known procedure; and running the engine up to full power to test its condition (Col.1, Line 54 – Col.2, Line 19 and Col.6, Lines 8 – 19). However, Lynn fails to disclose wherein the jet aircraft is aligned with the aircraft axis substantially parallel to

the actual wind direction and with the air inlet of the engine facing an actual wind direction.

On the other hand, Gerber teaches a method for testing an engine of a jet aircraft in a ground run-up enclosure (GRE) (Figs.1 and 2) comprising a step of aligning the jet aircraft with the aircraft axis substantially parallel to the actual wind direction and with the air inlet of the engine facing an actual wind direction (Col.1, Lines 36 – 45 and Col.2, Line 63 – Col.3, Line 4).

It would have been obvious to a person with ordinary skill in the art to aligned the Lynn jet aircraft facing an actual wind direction, as disclose by Gerber because some engines are very sensitive in their reaction to side winds, these engines required very precise air pressure conditions that may not exist in the presence of side winds, and failure of the engines could occur.

With respect to Claim 2, Lynn teaches moving the jet aircraft into the ground run-up enclosure with the aircraft axis substantially perpendicular to the rear wall (Fig.5).

With respect to Claim 3, Gerber teaches turning the jet aircraft within the ground run-up enclosure (Fig.2).

With respect to Claim 4, the obvious combination of the patents to Lynn and Gerber teach wherein the front side of the ground run-up enclosure faces the prevailing wind direction.

2. Claims 5 – 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lynn (US 5,856,640) in view of Lynn (US 5,127,609).

With respect to Claim 5, Lynn ('640) teaches a ground run-up enclosure, comprising a rear wall, a pair of side walls, each of which is connected to the rear wall at an oblique angle and an open front, the rear walls, side walls and open front together forming a generally U-shaped enclosure having sufficient width and depth to enclose a jet aircraft and with the open front being of sufficient width to permit the jet aircraft to enter the U-shaped enclosure (Fig.5), but fails to disclose wherein the side walls and the rear wall each have an inner face sloped downwardly and inwardly so as to form an oblique angle with the ground and are constructed so as to withstand a blast from a jet engine.

On the other hand, Lynn ('609) teaches a jet blast deflector fence having an inner face sloped downwardly and inwardly so as to form an oblique angle with the ground and are constructed so as to withstand a blast from a jet engine (Fig.1 – 3; Col.2, Lines 6 – 27).

It would have been obvious to a person with ordinary skill in the art to employ the Lynn ('609) oblique angle design with the Lynn ('640) GRE design because the oblique configuration would deflect the jet blast vertically and would increase the aerodynamic performance of the GRE.

With respect to Claim 6, Lynn ('640) teaches wherein at least a portion of the rear wall is substantially perpendicular to at least a portion of each of the side walls (Fig.5).

With respect to Claim 7, Lynn ('640) teaches wherein each of the side walls comprises a forward portion and a rearward portion through which the side wall is connected to the rear wall, the rearward portion of each the side wall being connected to the forward portion of the side wall and the rear wall at oblique angles (Figs.5 and 6).

With respect to Claim 8, Lynn ('640) teaches wherein the enclosure formed by the rear wall and the side walls comprises a portion of a polygon having greater than four sides (Fig.5).

With respect to Claim 9, Lynn ('609) teaches wherein the walls are arcuate (Figs.1 – 3).

With respect to Claim 10, Lynn ('609) teaches wherein the inner face of each of the walls forms an angle of from about 105 to about 135 degrees with the ground (Fig.3).

With respect to Claims 11 – 13, Lynn ('640) teaches wherein the width and depth of the enclosure are greater than a length of the jet aircraft, wherein the width and depth of the enclosure are greater than a wingspan of the jet aircraft, and wherein the width and depth of the enclosure are sufficient to permit the jet aircraft to turn while inside the enclosure.

With respect to Claim 14, Lynn ('640) teaches wherein the side walls and the rear wall each have a height of from about 20 to about 40 feet (Fig.6; Col.5, Line 2).

With respect to Claim 15, Lynn ('609) teaches wherein the rear wall of the enclosure has an arcuate inner face so as to upwardly direct the blast from the jet engine (Fig.3).

With respect to Claim 16, the obvious combination of the patents to Lynn('640) and Lynn('609) teach wherein each of the side walls comprises a forward portion and a rearward portion through which the side wall is connected to the rear wall, the rearward portion of each the side wall being connected to the forward portion of the side wall and the rear wall at oblique angles, and wherein the rear wall of the enclosure and the rearward portions of the side walls each have an arcuate inner face so as to upwardly direct the blast from the jet engine.

3. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lynn (US 5,856,640) in view of Lynn (US 5,127,609), and further in view of Gerber (US 3,842,941).

Lynn ('640) and Lynn ('609) teach the limitations discussed in the previous rejections, but fail to disclose wherein the open front of the enclosure faces a prevailing wind direction.

Nevertheless, Gerber teaches a method for testing an engine of a jet aircraft in a ground run-up enclosure (GRE) (Figs.1 and 2) comprising a step of aligning the jet aircraft with the aircraft axis substantially parallel to the actual wind direction and with the air inlet of the engine facing an actual wind direction (Col.1, Lines 36 – 45 and Col.2, Line 63 – Col.3, Line 4).

It would have been obvious to a person with ordinary skill in the art to aligned the Lynn jet aircraft facing an actual wind direction, as disclose by Gerber because some engines are very sensitive in their reaction to side winds, these engines required very precise air pressure conditions that may not exist in the presence of side winds, and failure of the engines could occur.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Satomi et al. teach an aircraft engine run-up hangar, Gerber et al. teach a method and means for controlling the air pressure in a sound-proofed hangar for testing jet engines, Hirakawa et al. teach a housing type aircraft engine run-up equipment, Yamazaki et al. teach a ground test facility for aircraft engine, Nakagawa et al. teach an aircraft engine testing facility, Turner teaches an engine test facility, Stalberg et al. teach a testing building for testing aircraft engines, Bridge Net International teaches a ground run-up enclosure, and Vital Link Incorporated teaches a ground run-up enclosure.




***Contact Information***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edgardo San Martin whose telephone number is (703) 308-1050. The examiner can normally be reached on 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Nappi can be reached on (703) 308-3370. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3431 for regular communications and (703) 305-3431 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

Edgardo San Martín  
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May 30, 2003

  
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